

Durham Research Online

Deposited in DRO:

08 September 2015

Version of attached file:

Accepted Version

Peer-review status of attached file:

Peer-reviewed

Citation for published item:

Tugby, Matthew (2012) 'Rescuing dispositionalism from the ultimate problem : reply to Barker and Smart.', *Analysis*, 72 (4). pp. 723-731.

Further information on publisher's website:

<http://dx.doi.org/10.1093/analys/ans112>

Publisher's copyright statement:

This is a pre-copyedited, author-produced PDF of an article accepted for publication in *Analysis* following peer review. The version of record Tugby, Matthew (2012) 'Rescuing dispositionalism from the ultimate problem : reply to Barker and Smart.', *Analysis*, 72 (4). pp. 723-731 is available online at: <http://analysis.oxfordjournals.org/content/72/4/723>

Additional information:

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a [link](#) is made to the metadata record in DRO
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full DRO policy](#) for further details.

Rescuing dispositionalism from the ultimate argument: reply to Barker and Smart

Penultimate Draft, Matthew Tugby

When referencing, please use the final published version in *Analysis* (2012, Vol. 72):

<http://analysis.oxfordjournals.org/content/72/4/723.abstract>

Abstract: Barker and Smart have argued that dispositional monism is just as susceptible to the Ultimate regress problem as Armstrong's contingent necessitation view of laws. In this response, I consider what implications this conclusion has for the dispositional essentialist project more generally. I argue that it is the monistic aspect of dispositional monism, rather than the dispositional essentialist aspect, which is the source of the problem raised by Barker and Smart. I then outline a version of dispositional essentialism which avoids the Ultimate problem by avoiding the commitment to monism. Despite the paper of Barker and Smart, it is not time to give up on the dispositionalist project just yet.

Key words: properties, laws, dispositions, qualities, essentialism, monism.

1. Introduction

Barker and Smart have raised a serious problem for a now-popular dispositional essentialist strategy for explaining the first-order distribution of property instantiations in the natural world. This strategy, advocated by for example Bird (2007) and Mumford & Anjum (2011), has at its heart the claim that '... properties have an inherent modal profile: it is part of the essential nature of properties that they constrain how they are distributed in instantiation across the space-time continuum' (Barker and Smart, Forthcoming: 5). As Barker & Smart also point out, those who appeal to this essentialist claim, such as Bird, have then typically explained it with a further relational constitution claim. This is the claim that the natures of properties are exhausted by the second-order modal relations which fix their dispositional roles. This is the dispositional monist view of properties. Dispositional essentialism is a straightforward consequence of dispositional monism because, if the nature of a property is entirely fixed by its dispositional modal features, then properties and causal behaviour can never come apart.

I agree with Barker & Smart that the Ultimate regress problem threatens the Bird-type dispositional view, as it does the Armstrongian account of laws. But in this response, I want to get

clear on where precisely this problem leaves the dispositional essentialist project more generally. What lessons can be learnt from Barker & Smart's worry for those seeking a dispositional essentialist account of properties and laws? More precisely, is it the dispositional aspect of the Bird-type view that is the source of the Ultimate problem, or is it the monistic aspect of the view that is to blame? Barker & Smart do not indicate either way, but until this question is addressed, it remains unclear whether their objection is fatal for dispositional essentialist accounts of properties and laws. In this response I will suggest that the source of the Ultimate problem is the monistic aspect of the Bird-type view, and not dispositional essentialism itself. To show that this is so, I will describe a different way of understanding dispositional essentialism which avoids the problem raised by Barker and Smart. Interestingly, this is a view which goes back at least to the mediaeval period and it is one which, I will suggest, is more plausible than may initially appear.

2. The ultimate argument

As mentioned above, the problem Barker and Smart raise for the aforementioned view is that it faces an analogous problem facing Armstrong's view of laws (1997), according to which laws consist in contingent second-order 'N' relations between purely categorical properties. Ironically, this is a problem that Bird (2005) himself has raised against Armstrong. The problem, briefly, is that the second-order relational facts cannot by themselves do the explanatory work that is required of them where the first-order distribution of property instantiations is concerned. This is because second-order relational facts are distinct from the facts about first-order instantiation distributions, which the former supposedly govern. Something more needs to be added to the story, therefore, which explains how the second-order relational facts constrain the first-order distribution of properties. How precisely is this explanatory gap to be filled? The obvious way for Armstrong to go is to posit a further contingent N relation – of the third-order – to explain the regularity between the second-order relational states of affairs and the first order facts. But then we have a regress in the making. As with the second-order relational fact, this third order relational fact will have to be distinct from the regularities it supposedly constrains, and so a further explanatory gap opens. And so on.

Barker and Smart then go on to show that, because of the structural similarities between Armstrong's N-relation view and the dispositional monist view of laws, the dispositional monist faces precisely the same kind of problem. The dispositional monist, to recall, explains the first-order activity of the world using second-order modal relations – which Barker and Smart call 'stimulus-response' (SR) relations. But as with Armstrong's view, these second-order relational facts have to be distinct from the first-order instantiation patterns which they supposedly govern, otherwise the view would collapse into a regularity view of laws. But then the explanatory gap described above in the case of Armstrong's view opens up again here. If further third-order SR relations are posited to close this explanatory gap, the threat of regress looms. An alternative solution is to posit a brute necessary connection between the second-order SR facts and the first-order instantiation patterns, but such a solution, Barker and Smart point out, is also available to the rival Armstrongian view.

Indeed, at this point, one might wonder whether there really are any significant differences between dispositional monism and the Armstrongian view. The only obvious difference, as Barker and Smart highlight, is that the second-order relations play a constituting role on the dispositional monist picture, as well as a governing role, meaning that they are internal relations. But as Barker and Smart indicate, the fact that SR relations play a constituting role, in addition to a governing role, does not help to save dispositional monism escape the aforementioned regress problem. This is because it is the fact that SR relations play a governing role 'which is where the problem comes from' (Barker and Smart, *Forthcoming*). That is, the explanatory gap between the second-order facts and the first-order instantiation patterns arises precisely at the point at which we want to say that the second-order facts govern and so explain those first-order patterns.

I think the lesson to be learnt at this point is that if a dispositional essentialist about properties is to avoid the regress problem in a way that is not also available to Armstrong, she needs to avoid giving a governing role to second-order (SR) relations. That is, she needs to explain the first-order behavioural regularities in a way that avoids appealing to governing second-order relational facts. This can indeed be achieved, I will argue, by removing the monistic aspect of the Bird-type view. But in order to reveal why, we first need to appreciate why dispositional monists like Bird are under pressure in the first place to give a special governing role to second-order relational states of affairs. This will help to

show the way out of the problem for those who want to rescue the dispositional essentialist view from the Ultimate problem.

3. Dispositional monism and governing SR relations

Barker and Smart do not pause to consider why precisely Bird's view ends up being structurally similar to Armstrong's, but the reason is, I suspect, as follows. Like Armstrong, dispositional essentialists want an explanation for first-order behavioural regularities which does not involve simply appealing to further higher-order regularities. The dispositional essentialists do this by claiming that the causal behaviour displayed by things – which determine the future property instantiations – stem from the natures of the properties instantiated. Therefore, it is not surprising, on this view, that things with property instantiations of the same kind give rise to the same effects. At this point, though, we are still entitled to ask what precisely it is about the natures of different kinds of property instantiation which allow them to determine different kinds of causal behaviour.

The answer to this last question cannot be entirely straightforward for dispositional essentialists of a monistic disposition, like Bird. The problem may be put as a dilemma. An obvious explanation as to why instances of different properties give rise to the specific causal behaviours that they do, is that different properties have different inherent or intrinsic natures. It is in virtue of the different inherent natures of the properties, it could be said, that different properties confer different causal dispositions. The problem for the dispositional monists is, however, that there simply are no inherent qualitative differences between properties. On the monistic view, the nature of a property is *completely* exhausted by its dispositions. But the nature of a disposition is fixed relationally rather than intrinsically: the nature of a disposition consists entirely in what manifestation is a disposition *for*. Intrinsic differences between different property instantiations cannot therefore be appealed to in order to ground the differences in the behaviour of their possessors. Perhaps, then, property instances should simply be understood relationally: different kinds of property instances are associated with different causal dispositions in virtue of relational differences. But this is not an attractive option either for the dispositional monist. Among other things, we surely want to leave it as open question as to whether some property instances are intrinsic to their possessors (i.e., non-relational).

At this point, a way of avoiding this dilemma suggests itself for the dispositional monists. The strategy is to move to the second-order level, as Armstrong does, in order to explain why, precisely, different kinds of first-order property instantiation give rise to the different behaviours responsible for the new property instantiations. Rather than explaining these differences in terms of the inherent qualitative differences between property instantiations, or in terms of first-order relations, they can instead attempt to explain these differences in terms of second-order relational facts. That is, they can try to allow the second-order relations between universals to determine first-order behaviour, just as they supposedly do on Armstrong's picture. But as Barker and Smart have shown, this strategy arguably leads to the Ultimate regress problem.

It is also well worth pointing how much this strategy of appealing to governing second-order relations in order to explain first-order behavioural patterns actually goes against the spirit of the dispositional view of properties, which is another reason why the version of dispositionalism to be outlined below is superior. One of the intuitions behind dispositionalism is that the properties of things are not inert: they pack a powerful punch; they give a causal 'biff' to their possessors. Those with these dispositionalist intuitions are therefore likely to be disappointed with the dispositional monist version of dispositionalism, which says that, actually, it is the second-order relational facts that ultimately govern behaviour, and that the first-order property instantiations themselves are, in effect, only indirectly responsible for the behaviours of their possessors.

4. Qualitative dispositional essentialism

Now that we have seen why, precisely, the dispositional monist is forced to give the second-order (SR) relations a governing role, we are in a position to see how the dispositional essentialists can avoid taking this route. It is the monistic and not the dispositional essentialist aspect of Bird's view which is the problem. Above we saw how the monist is forced to explain the causal behaviours associated with specific first-order property instantiations in terms of second order relations between the universals they are instantiations of. This was because, on the monistic view, there are no inherent qualitative differences amongst the first-order property instantiations themselves which can serve to explain differences in causal behaviour (and so the differences in new property instantiations that are

brought about). But what if we remedy this by claiming that properties *do* have a qualitative nature, a nature which also essentially confers certain dispositions upon its possessors? I will call such a view qualitative dispositional essentialism or QDE. If property instantiations were taken to have a qualitative aspect, they could then be said to have inherent natures which could serve, in principle, to explain the differences in first-order causal behaviour. The qualitative differences among things would, in short, replace the second-order SR relations in the ultimate *explanans* for why first order entities bring about the new property instantiations that they do. The qualities of things would therefore play the governing role, if one wanted to call it that, rather than the second-order relations. The governing claim would amount, on this view, to the idea that the property distributions at one time constrains which new property instantiations are to follow (or, in an indeterministic world, they constrain which new property instantiations are likely to follow). Importantly, since these ‘governors’ are now present at the first-order level, the gap which gave rise to the Ultimate regress problem on the monistic view – between the second-order governing level and the first order level – is closed. Moreover, this view is also more in line with the dispositionalist intuition mentioned above that it is the local property instances themselves which are the ultimate source of the causal ‘biff’ in the world.

Would such a view really be a version of dispositional essentialism? Is there not a contradiction in saying that qualities are essentially powerful? Well, of course, if one were to define a quality as something essentially non-modal, then there would indeed be a contradiction. But why should we define a quality in this way? Doing so would amount to begging the question against the view just outlined before it has gotten off the ground. There are no obvious reasons why it is incoherent to leave it an open question as to whether, for example, two properties could confer certain powers essentially, yet also be distinct in virtue of some qualitative, categorical difference. In fact, there is evidence that views allowing this possibility have been proposed since at least the mediaeval period¹, even though

¹ Hawthorne (2006: 212) suggests, for example, that something like this view may have been proposed by William of Ockham at one time. Hawthorne cites Ockham’s Reportatio IV, q2 as a source of evidence.

they do not appear to have many, if any, current advocates.² But before seeing whether QDE has any plausibility, and before seeing why the QDE strategy for overcoming the Ultimate regress problem is unavailable to an Armstrongian, let us first explain the key features of QDE in a little more detail, to demonstrate that it can indeed be cashed out in coherent way.

Unfortunately, there is not the space here to provide a detailed defence of QDE, but getting clear on some of the details will help to show what its main challenge is likely to be. First, how precisely are we to cash the claim that qualities essentially dispose their possessors towards certain behaviour? On Bird's view, we saw how the dispositional force of properties is cashed out in terms of second-order SR relations. But if, in order to avoid the Ultimate problem, we must avoid grounding dispositional characteristics in this way, how else can the dispositional claim be understood on the QDE picture? Here is a suggestion, and is one that has also been explored by Jacobs (2011) when making sense of the Heil-Martin view mentioned earlier. Most people agree that there is an intimate connection between disposition ascriptions and counterfactuals. To say that a vase is fragile is to say, very roughly, that if that vase were to be struck with a certain force, it would break. With this in mind, we could understand the claim that quality instances essentially dispose their possessors towards certain behaviour in the following way: *a thing's property instantiations entirely constitute the truthmakers for certain counterfactuals true of that thing*. Schematically, we may put this as follows -

QDE schema: where P is any natural property, necessarily, if *x* has P, then in virtue of *x*'s being P, if *x* were F, then *x* would be G (*ceteris paribus*).

Like Armstrong (2004), I take the truthmaking relation to be necessary and internal. Hence, given the nature of qualities instantiated by a thing, the counterfactuals made true of that thing could not fail to

² The closest modern view to the one under consideration is probably the 'two-sided' view of Martin and Heil (1999), which holds that properties are at once qualitative and dispositional. However, they resist the traditional realist view of properties by rejecting universals, preferring trope theory instead, and for this reason they do not couch their dispositionalist view in essentialist language. Jacobs (2011) also holds a similar view but appears to remain neutral on the tropes versus universals debate.

hold, on this proposal. This, I suggest, is one promising way of understanding the dispositional essentialist claim on the QDE view. It is a strikingly parsimonious theory of the truthmakers for counterfactuals: unlike Humean views, for example, it does not have to appeal to facts about properties *plus* facts about regularities (laws), in order to account for counterfactuals. And at no point have anything like Bird's second-order SR relations between properties been appealed to either. It is, instead, purely the qualitative aspects of a thing's properties which ground its dispositions.

It is worth noting, however, that this does not mean a QDE advocate need prohibit abstracting away from the first-order level, and identifying the general dispositional relationships holding between properties in virtue of their qualitative natures. Generalising in this way would be particularly useful for capturing the dispositional identities of property instantiations which remain unmanifested, for example. A QDE advocate need not and should not deny, therefore, that generalisations like 'smoking disposes towards cancer' have a useful role to play in metaphysics. On the QDE theory outlined, however, such generalisations will be seen as derivative from the first-order facts about the causal manifestations of particular people who smoke.³ In other words, the first-order causal facts will be explanatorily prior to the second-order generalisations, on this view. In contrast, since on Bird's view the second-order facts play a governing role, they must in some sense be prior to the first-order facts. This is why dispositional monism is, but QDE is not, open to the Ultimate problem.

Let us now briefly address the question whether something like QDE may be available to Armstrong as a way of avoiding the Ultimate problem. The answer is that it is not, which is important, since as Barker and Smart have argued, it is not clear that the dispositional monist can avoid the Ultimate problem in a way which is not also available to Armstrong. Now, Armstrong accepts that properties have inherent qualitative natures, so why, one may ask, could he not he simply say that, of necessity, quality instantiations necessitate certain causal behaviour (or, if the world is indeterministic, necessitate certain chances of certain effects)? This would remove the second-order

³ The general dispositional relationships between properties are I think more easily understood metaphysically on a universals rather than trope theory of properties. However, for the purposes of this paper we need not address the trope versus universals debate.

relational middle men, and as long as the necessary connections were ones of strong metaphysical necessity, no further relation would be needed to tie qualities to dispositions, thereby avoiding the regress worry. Well, in response, it is quite true that such a view is available to Armstrong, but importantly such a view would not be an *essentialist* one, given the nature of some of Armstrong's central commitments. As Fine (1994) has taught us, necessity does not itself entail essence. And given Armstrong's commitment to properties being in and of themselves purely categorical (the 'quidditist' thesis), the necessities posited could not be said to flow from the natures of the qualities of things. Rather, the necessities would instead have to be brute and external. To put the point in terms of truthmaking again, the truthmakers for disposition counterfactuals would, on this view, have to be the property instantiations *plus* the external relations of necessity holding between them. On the QDE view, in contrast, it is the inherent natures of the properties themselves which entirely determine the dispositions of things. And given that the QDE advocate offers an essentialist explanation of the necessity here, they will claim that their view is superior to the analogous Armstrongian view, which must view the necessity of dispositions as external and so utterly unexplainable.

Of course, opponents of dispositional essentialism might object at this point that the alleged internal connection between qualities and dispositions is itself pretty opaque. Sure, if qualities by their very nature disposed their possessors in certain ways, then we would have a clear explanation for the behavioural regularity in the world. But this alleged essential connection, it may be complained, is counterintuitive. Cannot, for example, we easily conceive of a thing having a certain property, but exhibiting very different behaviour to that we usually associate with having that property? Indeed, I take it that this objection will be one of the strongest challenges to facing QDE. Unfortunately, I cannot provide a detailed defence of QDE here, but let me conclude with two remarks. First, even if QDE does clash with our intuitions about what is possible, it is still open for the QDE advocate to deny, as Kripke, Bird, and other essentialists have, that apparent conceivability is not a good guide to possibility. If QDE has other theoretical virtues, such as being more explanatorily rich than Humean views, being more parsimonious than views which give a governing role to second-order relations, and having the ability to overcome problems facing rival views such as the Ultimate problem – as I believe it does –, then perhaps we should accept QDE as a genuine contender and thereby bring our

modal intuitions into question. Second, it should also be pointed out that it is far from clear that the alleged essential connection between qualitative features and dispositional features really *does* go against our modal intuitions. Consider, for example, those qualities which are closest to home: phenomenal qualities like feeling pain or feeling an itch. Is it possible to feel genuine, intense pain without being disposed to take steps to make the pain stop? Is it possible to feel an itch without being disposed to scratch the affected area?⁴ If we put these questions to those whose judgements will not be clouded by the influence of Humean philosophy, it is far from clear that they would answer in the affirmative. Unfortunately, I cannot explore these thoughts in any more detail here, but such an investigation into the modal intuitions that we actually have would be extremely worthwhile.

5. Conclusion

I agree that dispositional monism has no significant advantage over Armstrong's categoricalist view where the Ultimate argument is concerned. But the fault here is not in the dispositional aspect of the Bird-type view, but in the monism, as the QDE solution to the Ultimate regress problem shows. It is not time, yet, to give up on the dispositional theory of properties.⁵

References

- Armstrong, D.M. 1997. *A World of States of Affairs*. Cambridge: CUP.
- Armstrong, D.M. 2004. *Truth and Truthmakers*. Cambridge: CUP.
- Bird, A. 2005. The ultimate argument against Armstrong's contingent necessitation view of laws. *Analysis* 65: 147-155.
- Bird, A. 2007. *Nature's Metaphysics: Laws and Properties*. Oxford: OUP.
- Fine, K. 1994. Essence and modality. In *Philosophical Perspectives 8: Logic and Language*, ed. J. Tomberlin, 1-16. Atascadero, CA: Ridgeview.

⁴ The question is not of course whether we always scratch in response to an itch, or always remove the cause of pain when in pain. As is well known, the manifestations of dispositions can be prevented by 'finks' or antidotes.

⁵ I am very grateful to Stephen Barker and Ben Smart for their valuable comments on an earlier draft.

Hawthorne, J. 2006. Causal structuralism. In *Metaphysical Essays*, 211-27. Oxford: OUP.

Heil, J. & Martin, C.B. 1999. The ontological turn. *Midwest Studies in Philosophy* 23: 34 – 60.

Jacobs, J. 2011. Powerful qualities, not pure powers. *The Monist* 94: 81-102.

Mumford, S & Anjum, R. 2011. *Getting Causes from Powers*. Oxford: OUP.